

**EQUFLOW****PFA(0045, 0085, 00125) Turbine Flow Sensor**

*PFA wetted parts, F.S. ranges of 2, 20, & 40 lpm, Frequency Output*

**DESCRIPTION**

The PFA flow sensor has low flow sensing capabilities in a wide range of applications, and is suitable for clear, opaque, neutral, corrosive and aggressive liquids including fuel.

An ultra light-weight turbine follows the fluctuation of flow very accurately and generates a high resolution IR reflected digital output signal.

Aggressive media can be measured as the only wetted materials are PFA and a ruby bearing.

K-factors (pulses per liter) are factory determined and provided for each flow tube. Customer specified K-factors can be accommodated and are programmed at the factory.

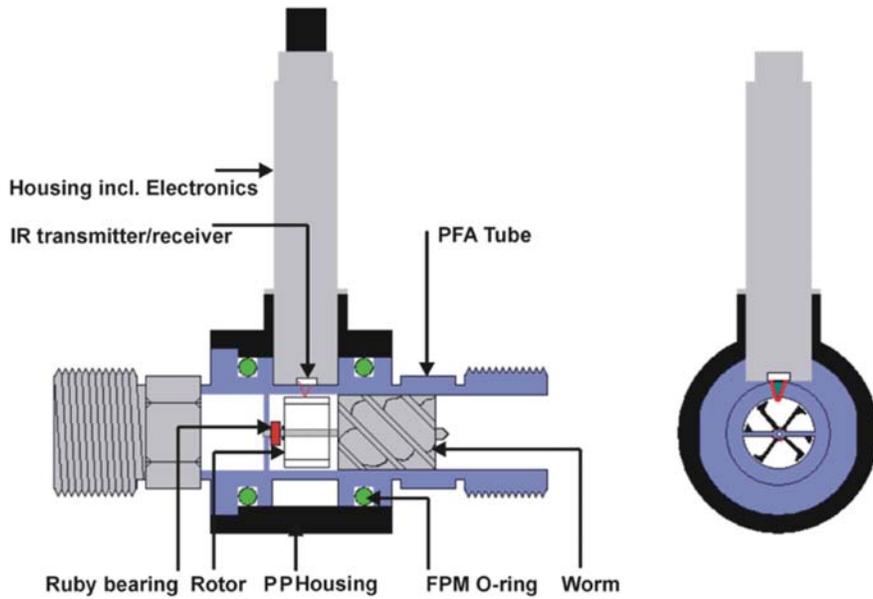
External optional electronic packages include model PD6300 Flow rate indicator and totalizer and PD6310 batch controllers. Rich in features, these products provide complete solutions for monitoring and batching applications.

**Features**

- Turbine flowsensor with high resolution output
- Flow measuring by revolutionary IR turbine reflection
- PFA for high chemical and corrosion resistance
- High accuracy and repeatability
- Suitable for opaque liquids
- PFA meets all the requirements of the US Pharmacopeia Class VI
- Programmable K-factor (at factory)
- All wetted parts are made of PFA with ruby bearing

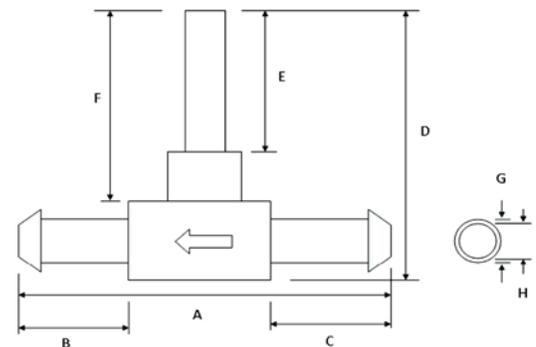
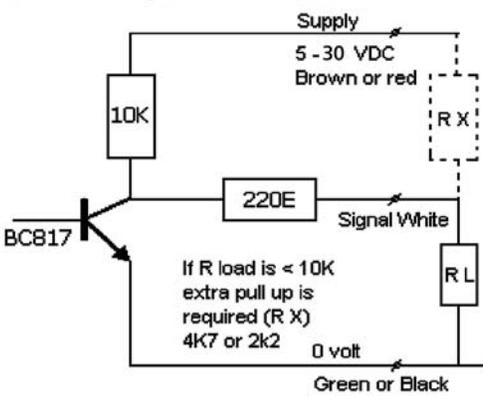
**SPECIFICATIONS**

				Patent No. US5388466
<b>GENERAL</b>				
<b>Model</b>	<b>PFA0045</b>	<b>PFA0085</b>	<b>PFA0125</b>	
Inner diameter in mm	4.5	8.5	12.5	
Flow range	0.1 - 2 L/min	0.5 - 20 L/min	1.5 - 40 L/min	
Accuracy	1% of reading	1% of reading	1% of reading	
Repeatability	< 0.15 %	< 0.15 %	< 0.15 %	
Wetted parts	PFA / Ruby	PFA / Ruby	PFA / Ruby	
Body	PP	PP	PP	
Tube connection thread/hosebarb	1/8 " NPT / 7 mm	1/4 " NPT/ 12 mm	1/2 " NPT/BSP	
Tube length in mm	52	60	72	
Liquid temperature in °C	-20 to +80	-20 to +80	-20 to +80	
Max. pressure at 20° C in bar (psi)	20 (284)	15 (213)	10 (142)	
Viscosity in cSt.	0.8 - 10	0.8 - 10	0.8 - 10	
K factor (water) in pulse/Liter (nominal)	110,000	6,100	2,000	
Power supply	5 - 30 Vdc	5 - 30 Vdc	5 - 30 Vdc	
Output signal	5 - 30 V sq. wave	5 - 30 V sq. wave	5 - 30 V sq. wave	
Power consumption	34 mA at 5 V	34 mA at 5 V	34 mA at 5 V	
Electrical lead	PVC 1 meter	PVC 1 meter	PVC 1 meter	
Recommended Line filter	100 µm	100 µm	150 µm	



**Working Principal:**  
 A static worm forces the passing fluid to spin. The spinning fluid drives a rotor with reflectors into a frictionless rotation. A high resolution infrared sensor determines the rate of flow by counting the passing reflections. The set up even allows the flow of opaque liquids to be determined accurately. The ultra low mass of the rotor guarantees a quick response to changes in the rate of flow

**Wiring:**  
**Power Supply 5-30 Vdc**  
**Output All Sensors: NPN square wave**



Dim. (MM)	0045- Barb	0045- NPT	0085- Barb	0085- NPT	0125- NPT
A	50.8	51.5	60.3	60.3	71.5
B	14.7	15.8	19.2	19.2	22.3
C	16.6	15.8	19.2	19.2	26.3
D	60.6	60.6	66.8	66.8	71.2
E	36.7	36.7	36.7	36.7	36.7
F	46.5	45.5	44.4	44.4	45.6
G	7.8	9.8	13.2	13.2	14.0
H	4.6	4.7	9.0	9.0	20.3

**ORDERING INFORMATION**  
**ABCDEFGH**  
**PFA0045TNP01XA**

A Model	B Tube Dia./Range	C Wetted Material	D Connection	E Cable Type	F Cable Length	G Housing	H Power
PFA	0045= 4.5 mm/0.1-2 l/min 0085= 8.5 mm/1.0-20 l/min 0125= 12.5 mm/2.0-38 l/min	T=PFA & Ruby	H= Hose Barb N= NPT B= BSP(12.5 mm only)	P= PVC	01= 1 meter (Standard) 02= 2 meters	X= Fixed Housing	A= 5-30 VDC

**Ask About Our Other Equiflow Products.....**

- Disposable Flow Sensor
- Stainless Flow Sensor
- Electronic packages for use with Flow Meters
  - PD6300 Flow rate indicator and totalizer
  - PD6310 batch controllers

